CLAIMS

1. A conductive filler for a conductive resin, characterized by comprising a vapor grown carbon fiber having a specific surface area of 10 to 50 m^2/g and an aspect ratio of 65 to 1,000.

2. The conductive filler for a conductive resin as claimed in claim 1, characterized by comprising a vapor grown carbon fiber having a specific surface area of 15 to 40 m^2/g and an aspect ratio of 110 to 200.

3. The conductive filler as claimed in claim 1 or 2, wherein the vapor grown carbon fiber has a fiber diameter of 50 to 200 nm, a mean fiber length of 10 μm or more, and a peak intensity ratio ($I_0 = I_{1360}/I_{1580}$) of 0.1 to 1, wherein I_{1580} represents a peak height at 1,580 cm^{-1} and I_{1360} represents a peak height at 1,360 cm^{-1} in a Raman scattering spectrum.

4. A conductive resin composition comprising the conductive filler as claimed in claim 1 in a matrix resin, which composition contains the conductive filler in an amount of 1 to 70 mass%.

5. The conductive resin composite composition as claimed in claim 4, wherein the matrix resin is at least one species selected from thermoplastic resin and thermosetting resin.

6. A method for producing the conductive resin composition as claimed in claim 4, comprising melt-mixing a conductive filler composed of vapor grown carbon fiber into a matrix resin, characterized in that breakage rate of the

vapor grown carbon fiber during melt-mixing is suppressed to 20% or less.

7. The method for producing a conductive resin composition as claimed in claim 6, further comprising monitoring the mixture under an electron microscope, so that the melt-mixing is performed without generating an aggregated mass of vapor grown carbon fiber.

8. The method for producing a conductive resin composition as claimed in claim 6, wherein melt-mixing is performed by means of a twin-screw extruder (same rotation direction) or a pressure kneader.

9. A synthetic resin molded article comprising the conductive resin composition as claimed in claim 4.

10. A container for electric and electronic parts comprising the conductive resin composition as claimed in claim 4.

11. A conductive sliding member comprising the conductive resin composition as claimed in claim 4.

12. A conductive thermal-conducting member comprising the conductive resin composition as claimed in claim 4.

13. A composite material composition produced by kneading a matrix synthetic resin and a vapor grown carbon fiber, wherein the vapor grown carbon fiber has a fiber diameter of 50 to 200 nm, an aspect ratio of 40 to 1,000, and a peak intensity ratio ($I_0 = I_{1360}/I_{1580}$) of 0.1 to 1, wherein I_{1580} represents a peak height at 1,580 cm^{-1} and I_{1360} represents

a peak height at 1,360 cm^{-1} in a Raman scattering spectrum, and the composition exhibits an anisotropic ratio in mold shrinkage of 0.5 or more.

14. The composite material composition as claimed in claim 13, wherein the composition is produced by incorporating a vapor grown carbon fiber having a bulk density of 0.01 to 0.1, while a breakage rate of the carbon fiber is controlled to 20% or less.

15. The composite material composition as claimed in claim 13, wherein the synthetic resin is a thermoplastic resin.

16. The composite material composition as claimed in claim 13, which exhibits a thermal conductivity of 1 W/mK or higher.

17. A method for producing a composite material composition characterized by comprising kneading a thermoplastic resin and a vapor grown carbon fiber having a fiber diameter of 50 to 200 nm, an aspect ratio of 40 to 1,000, a bulk density of 0.01 to 0.1 and a peak intensity ratio ($I_0 = I_{1360}/I_{1580}$) of 0.1 to 1, wherein I_{1580} represents a peak height at 1,580 cm^{-1} and I_{1360} represents a peak height at 1,360 cm^{-1} in a Raman scattering spectrum, wherein the kneading is performed without applying strong shear force, so as to suppress breakage rate of the carbon fiber to 20% or less.

18. The method for producing a composite material composition as claimed in claim 17, wherein the vapor grown carbon fiber is incorporated into a composite material

composition in an amount of 10 mass% to 70 mass% during kneading of the thermoplastic resin and the vapor grown carbon fiber.

19. The method for producing a composite material composition as claimed in claim 17, wherein the thermoplastic resin and the vapor grown carbon fiber are kneaded while breakage rate of the carbon fiber is suppressed to 20% or less, by melt-kneading using a pressure kneader and subsequent pelletizing using a single-screw extruder or a reciprocating-single-screw extruder.

20. A method for producing a composite material molded article, characterized by comprising molding a composite material composition produced by the method for producing a composite material composition as claimed in claim 17, at a mold temperature 20°C to 40°C higher than such an injection molding temperature that the time required for cooling the mold is five seconds and a non-defective production rate of 95% or higher is attained.

21. A precision-molding synthetic resin molded article, which employs a resin composition produced through a method for producing a precision-molding composite material composition as claimed in claim 17.

22. A container for electric and electronic parts, which employs a resin composition produced through a method for producing a precision-molding composite material composition as claimed in claim 17.

23. A sliding member composition produced by kneading a matrix synthetic resin and a vapor grown carbon fiber,

wherein the vapor grown carbon fiber has a fiber diameter of 50 to 200 nm, an aspect ratio of 40 to 1,000, and a peak intensity ratio ($I_0 = I_{1360}/I_{1580}$) of 0.1 to 1, wherein I_{1580} represents a peak height at 1,580 cm^{-1} and I_{1360} represents a peak height at 1,360 cm^{-1} in a Raman scattering spectrum, and the composition exhibits a heat deflection temperature of 160°C or higher under heavy load, as determined in accordance with ASTM D 648.

24. The sliding member composition as claimed in claim 23, which contains the vapor grown carbon fiber in an amount of 10 mass% to 70 mass%.

25. The sliding member composition as claimed in claim 23, which exhibits a thermal conductivity of 1 W/mK or higher.

26. The sliding member composition as claimed in claim 23, which exhibits a flexural modulus of 4,000 MPa or more.

27. A method for producing a sliding member composition characterized by comprising kneading a thermoplastic resin and a vapor grown carbon fiber having a fiber diameter of 50 to 200 nm, an aspect ratio of 40 to 1,000, a bulk density of 0.01 to 0.1, and a peak intensity ratio ($I_0 = I_{1360}/I_{1580}$) of 0.1 to 1, wherein I_{1580} represents a peak height at 1,580 cm^{-1} and I_{1360} represents a peak height at 1,360 cm^{-1} in a Raman scattering spectrum, wherein the kneading is performed without applying strong shear force so as to suppress breakage rate of the carbon fiber to 20% or less.

28. The method for producing a sliding member composition as claimed in claim 27, wherein the vapor grown carbon fiber is incorporated into a composite material

composition in an amount of 10 mass% to 70 mass% during kneading of the thermoplastic resin and the vapor grown carbon fiber.

29. The method for producing a sliding member composition as claimed in claim 27, wherein the thermoplastic resin and the vapor grown carbon fiber are kneaded while breakage rate of the carbon fiber is suppressed to 20% or less, by melt-kneading using a pressure kneader and subsequent pelletizing using a single-screw extruder or a reciprocating-single-screw extruder.

30. The method for producing a molded sliding member, characterized by comprising molding a sliding member composition produced by the method for producing a sliding member composition as claimed in claim 27, at a mold temperature 20°C to 40°C higher than such an injection molding temperature that the time required for cooling the mold is five seconds and a non-defective production rate of 95% or higher is attained.

31. A sliding synthetic-resin molded article, which employs a resin composition produced by the method for producing a sliding member composition as claimed in claim 27.

32. A non-lubricant sliding member, which employs a resin composition produced by the method for producing a sliding member composition as claimed in claim 27.